X is known

Y is known

$\mathring{X}$ is known

$\mathring{Y}$ is known

$$\mathring{X} = \mathring{X}_1 + \mathring{X}_2 + \mathring{X}_3 + \mathring{X}_4$$
$$\mathring{Y} = \mathring{Y}_1 + \mathring{Y}_2 + \mathring{Y}_3 + \mathring{Y}_4$$
$$X_1 = X_2 = X_3 = X_4 = X$$
$$Y_1 = Y_2 = Y_3 = Y_4 = Y$$

$$\begin{aligned}
&\left(X - \mathring{X}_1 - 1\right) \cdot \left(Y - \mathring{Y}_1 - 1\right) + \\
&\left(X - \mathring{X}_2 - 1\right) \cdot \left(Y - \mathring{Y}_2 - 1\right) + \\
&\left(X - \mathring{X}_3 - 1\right) \cdot \left(Y - \mathring{Y}_3 - 1\right) + \\
&\left(X - \mathring{X}_4 - 1\right) \cdot \left(Y - \mathring{Y}_4 - 1\right) =
\end{aligned}$$

$$\sum_i \left(X - \mathring{X}_i - 1\right) \cdot \left(Y - \mathring{Y}_i - 1\right) =$$

$$\begin{aligned}
&\sum_i \left(X \cdot Y - X \cdot \mathring{Y}_i - X\right) + \\
&\sum_i \left(-\mathring{X}_i \cdot Y + \mathring{X}_i \cdot \mathring{Y}_i + \mathring{X}_i\right) + \\
&\sum_i \left(-Y + \mathring{Y}_i + 1\right) =
\end{aligned}$$

$$\begin{aligned}
&\sum_i (X \cdot Y - X - Y + 1) + \\
&\sum_i \left(-X \cdot \mathring{Y}_i - \mathring{X}_i \cdot Y + \mathring{X}_i \cdot \mathring{Y}_i + \mathring{X}_i + \mathring{Y}_i\right) =
\end{aligned}$$

$$\begin{aligned}
&\sum_i (X \cdot Y - X - Y + 1) + \\
&\left(-X \cdot \mathring{Y}_1 - \mathring{X}_1 \cdot Y + \mathring{X}_1 \cdot \mathring{Y}_1 + \mathring{X}_1 + \mathring{Y}_1\right) + \\
&\left(-X \cdot \mathring{Y}_2 - \mathring{X}_2 \cdot Y + \mathring{X}_2 \cdot \mathring{Y}_2 + \mathring{X}_2 + \mathring{Y}_2\right) + \\
&\left(-X \cdot \mathring{Y}_3 - \mathring{X}_3 \cdot Y + \mathring{X}_3 \cdot \mathring{Y}_3 + \mathring{X}_3 + \mathring{Y}_3\right) + \\
&\left(-X \cdot \mathring{Y}_4 - \mathring{X}_4 \cdot Y + \mathring{X}_4 \cdot \mathring{Y}_4 + \mathring{X}_4 + \mathring{Y}_4\right) =
\end{aligned}$$

$$
\begin{aligned}
&\sum_i (X \cdot Y - X - Y + 1) + \\
&- X \cdot \mathring{Y} - Y \cdot \mathring{X} + \\
&\left(\mathring{X}_1 \cdot \mathring{Y}_1 + \mathring{X}_1 + \mathring{Y}_1 \right) + \\
&\left(\mathring{X}_2 \cdot \mathring{Y}_2 + \mathring{X}_2 + \mathring{Y}_2 \right) + \\
&\left(\mathring{X}_3 \cdot \mathring{Y}_3 + \mathring{X}_3 + \mathring{Y}_3 \right) + \\
&\left(\mathring{X}_4 \cdot \mathring{Y}_4 + \mathring{X}_4 + \mathring{Y}_4 \right) =
\end{aligned}
$$

$$
\begin{aligned}
&\sum_i (X \cdot Y - X - Y + 1) + \\
&- X \cdot \mathring{Y} - Y \cdot \mathring{X} + \\
&\mathring{X} + \mathring{Y} \\
&+ \mathring{X}_1 \cdot \mathring{Y}_1 \\
&+ \mathring{X}_2 \cdot \mathring{Y}_2 \\
&+ \mathring{X}_3 \cdot \mathring{Y}_3 \\
&+ \mathring{X}_4 \cdot \mathring{Y}_4
\end{aligned}
$$